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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Eric Labarriere

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EXAMINER

PALABRICA, RICARDO J

ART UNIT

PAPER NUMBER

3663

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,168	Applicant(s) LABARRIERE ET AL.	
	Examiner Rick Palabrica	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24 and 26-48 is/are pending in the application.
 4a) Of the above claim(s) 29, 38 and 41-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 24, 26-28, 30-3739, 40, 47 and 48 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Applicant's 5/26/09 Amendment, which directly amended claims 24 and 36, added new claims 47 and 48, and traversed the rejection of claims in the 3/6/09 Office action, is acknowledged.

Applicant argues that the amended claims define over either one of applied art, Bryan et al. or Manson et al.

The examiner agrees with regard to Bryan et al. but disagrees with regard to Manson et al.

Response to Arguments

2. Applicant argues that: a) "Manson cannot have anything called noses that 'converge to be narrower than the diameter of the fuel rods in a direction that is oriented towards the outer side of the end piece' as Manson requires that the fuel rods fit within its bands"; and b) "the sleeve 90 receive the fuel rods and can therefore not be in a longitudinal continuation of the guide tubes or the fuel rods as claimed."

The examiner disagrees.

As to argument a):

First, the so-called convergence of the noses is NOT in the direction of towards the outer side of the end piece but in a downward, longitudinal direction and towards the direction of the inner surface of the end piece (e.g., see Fig. 6 in the instant application). Note that the outer side of the end piece is disposed laterally and away from of the inner side. Thus, if the noses were "converging from towards the outer surface of the end

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piece”, as applicant asserts, they would DIVERGE rather than converge. Note further the following statement in the Specification:

“The units 33 that are arranged under the fuel rods 3 have a diameter substantially corresponding to the outer diameter of rods 3 and are extended downwards by noses 39. These noses are substantially of ogive-like forms converging downwards” (see page 9, 4th paragraph).

Based on the above, and for consistency with the specification and the drawings, the examiner applies the same downward direction of convergence of the noses.

Second, as stated in section 2 of the 3/6/09 Office action, applicant’s claim language, “nose” reads on Manson et al.’s sleeve 90 that has curved elastic strips 98. Additionally, this sleeve includes threaded end 104 (see Fig. 8 and col. 5, lines 10+). Note from this figure that sleeve 90 converges downwards toward its threaded end 104, which is narrower in diameter than the diameter of fuel rod 2. Applicant’s term, “converge” means “join” or “unite” or “meet”. The wider portion of sleeve 90 of Manson et al. joins, meets, or unites with the narrower threaded end 104. Thus, Manson et al. meet the claim limitation pertaining to the noses.

As to argument b), again note from Fig. 8 that sleeve 90 extends longitudinally BEYOND the lower end of fuel rod 2. Therefore, contrary to applicant’s allegation, the noses (i.e., sleeves 90) of Manson et al. are configured relative to the fuel rod, as in the claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 24, 26-28, 30-37, 39, 40, 47 and 48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The new matter pertains to noses that “converges [sic] to be narrower than the diameter of the fuel rods in a direction that is orientated towards the outer side of the end piece”, as recited in claims 24 and 36. See also section 2 above.

4. Claims 24, 26-28, 30-37, 39, 40, 47 and 48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

There is neither an adequate description nor enabling disclosure of noses that “converges [sic] to be narrower than the diameter of the fuel rods in a direction that is orientated towards the outer side of the end piece”, as recited in claims 24 and 36.

5. Claims 24, 26-28, 30-37, 39, 40, 47 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague, indefinite and incomplete, and their metes and bounds cannot be determined because the claims are inconsistent with the specification in regard to the direction of convergence of the noses.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 24, 26 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Manson (U.S. 4,772,447).

The reasons are the same as those stated in section 2 of the 3/6/09 Office action, as further clarified in section 2 above, which reasons are herein incorporated.

7. Claims 28, 30, 31, 34, 35, 37, 39 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Manson et al.

The reasons are the same as those stated in section 3 of the 3/6/09 Office action, as further clarified in section 2 above, which reasons are herein incorporated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 27, 32, 33, 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manson et al., as applied to claims 24, 26, 28, 34-37, 39 and 40 above, and further in view of Grattier.

As to claims 27, 32 and 33, the reasons are the same as those stated in section 4 of the 3/6/09 Office action, as further clarified in section 2 above, which reasons are herein incorporated.

As to claims 47 and 48, having the noses in Moses et al. converge to a point rather than to a plane is a matter of design choice and or optimization. A pointed nose end would provide better stability and more accurate positioning in the lower end plate than a planar end but would be more involved to manufacture. As to matters of optimization within prior art conditions or through routine experimentation, see MPEP 2144.05 II.A).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rick Palabrica/
Primary Examiner, Art Unit 3663

June 15, 2009